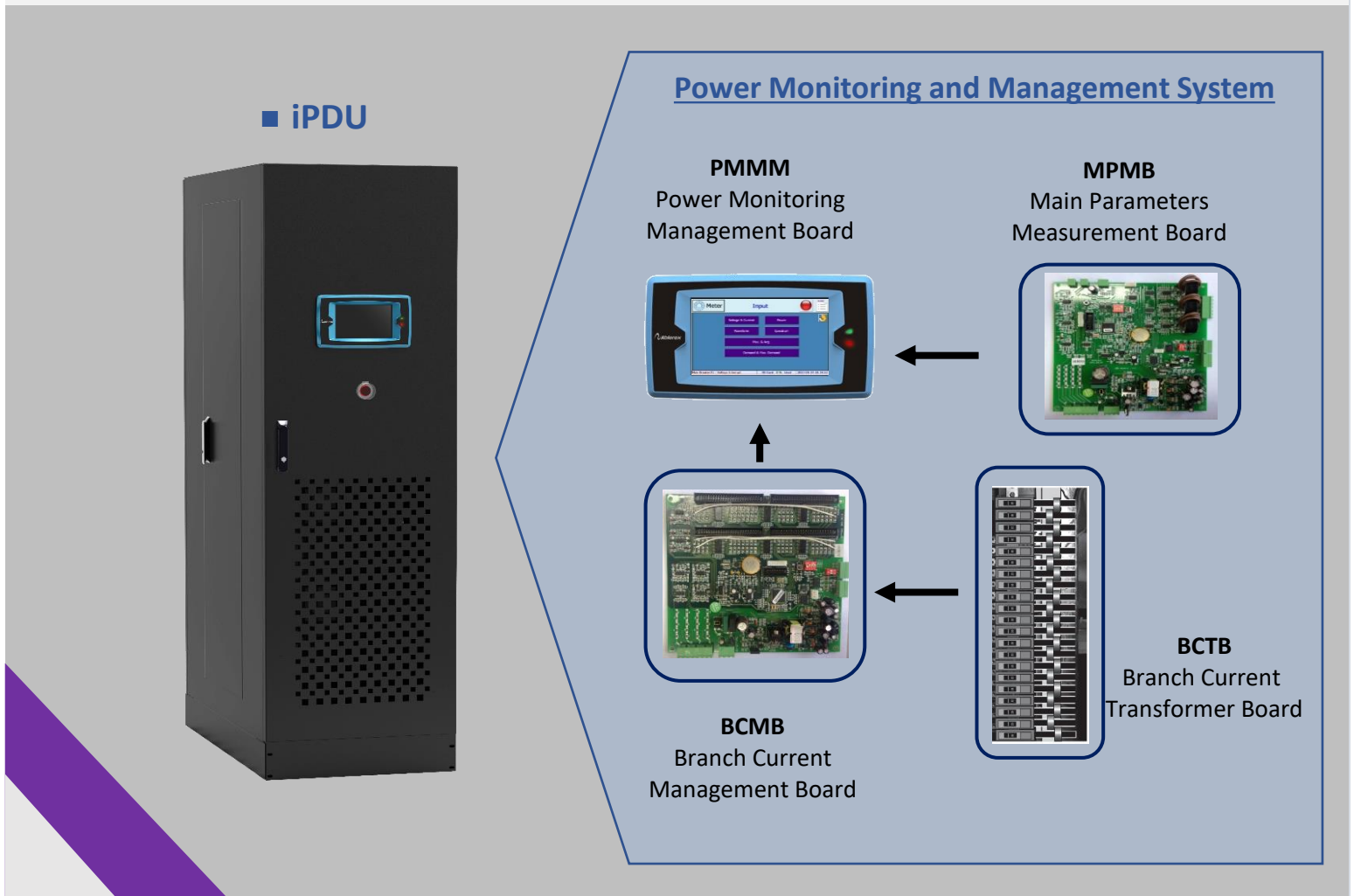
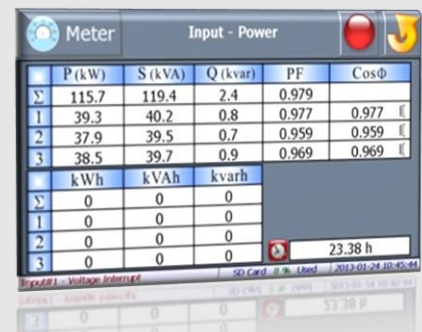
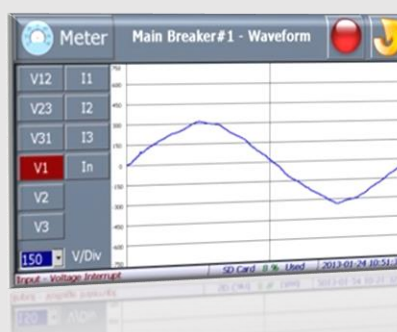
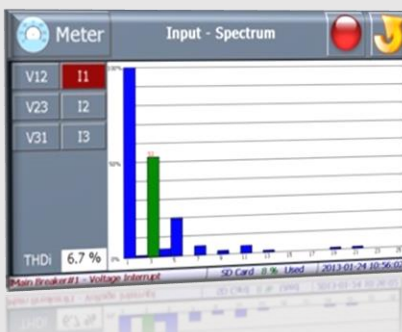


Power Monitoring and Management System (PMMS) for Power Distribution Unit



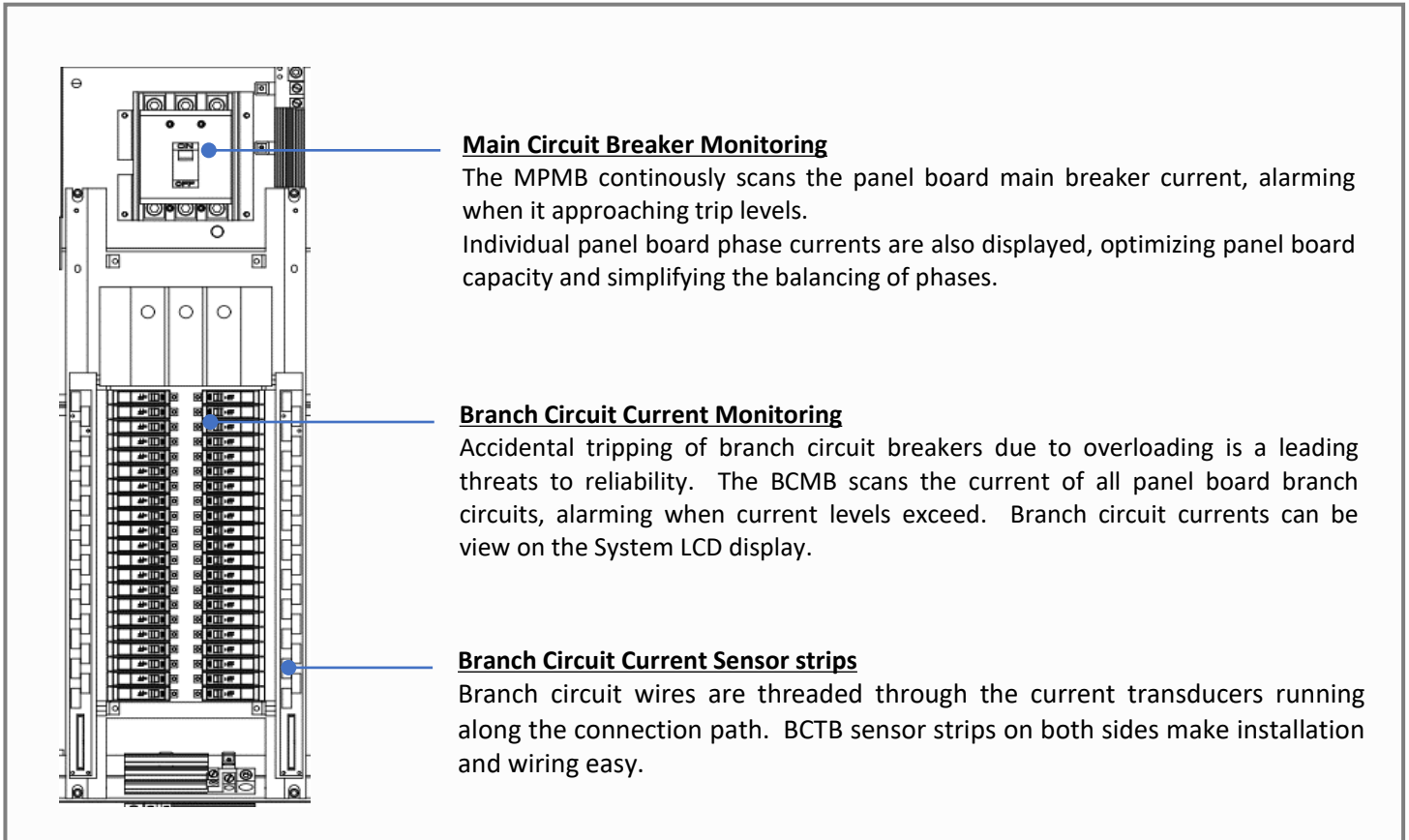
- Solution for Data Center and Critical Power Distribution Facilities.
- Factory-assembled Power Distribution Modules with breaker position monitoring.
- Advanced Main Breaker and Branch Circuit Power Management & Monitoring .
- Affordable & Reliable Power Transmission and Distribution Centre.
- User Friendly Interface - 7" Graphic LCD Touch Screen
- Programmable Alarm Level
- Ethernet /RS-485 for Remote Monitoring.
- Easy integration of data transmission with other commonly use building management system.



PMMS Features

The integrated circuit monitoring solution

The Branch Circuit Monitoring system is seamlessly integrated into the Alerex Intelligent Power Distribution Unit (iPDU), to monitor all circuits and sub main breakers.



Main Circuit Breaker Monitoring
The MPMB continuously scans the panel board main breaker current, alarming when it approaching trip levels. Individual panel board phase currents are also displayed, optimizing panel board capacity and simplifying the balancing of phases.

Branch Circuit Current Monitoring
Accidental tripping of branch circuit breakers due to overloading is a leading threats to reliability. The BCMB scans the current of all panel board branch circuits, alarming when current levels exceed. Branch circuit currents can be view on the System LCD display.

Branch Circuit Current Sensor strips
Branch circuit wires are threaded through the current transducers running along the connection path. BCTB sensor strips on both sides make installation and wiring easy.



Power Monitoring Management Board (PMMM)

The PMMM integrates power monitoring and advanced breaker scanning technology in a single system, preventing distribution load losses, optimizing distribution reliability and current utilization by:

- Simultaneously measure up to 84MCBs in the panel boards.
- Provide power metering for both Input Mains and Output Branch Circuits.
- Provide detailed current information for phase balancing and circuit management.
- Alerting users before the breakers trip.



iPDU Features

Hot-Swappable Plug In/Bolt on Breakers

• The panel board is design to install with plug-in & bolt on thermal-magnetic circuit breakers to provide overcurrent protection. These breakers are easy to install , match your site specification and come in various ratings.

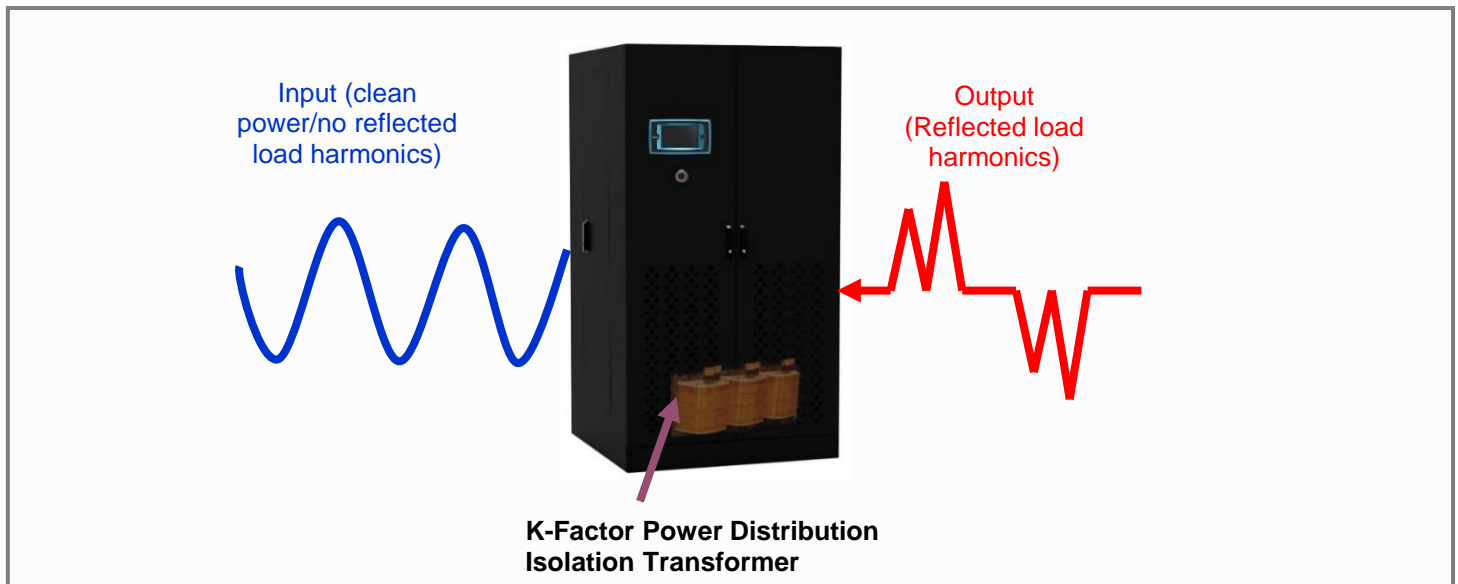
- 1-Pole: 15A, 20A and 30A
- 2-Pole: 15A, 20A ad 30A
- 3-Pole: 20A, 30A, 50A and 60A

The breakers can be safely add-ons and replace without down time.



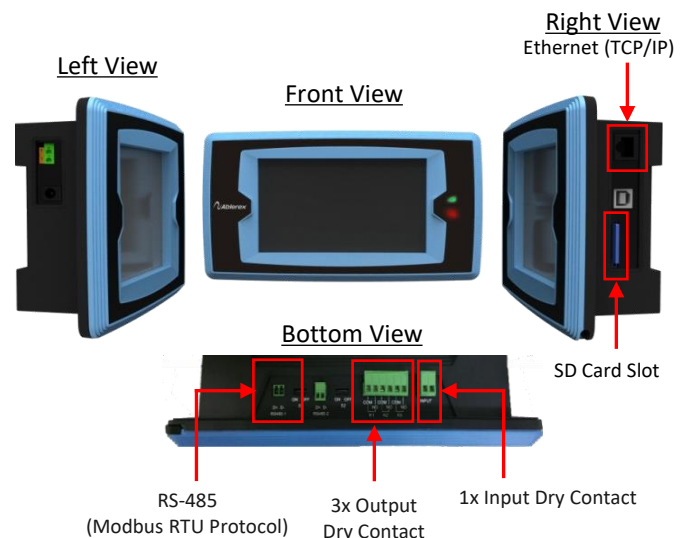
Total Harmonic Management Solutions

Harmonics commonly reflected from computer and electronic loads can cause disturbance throughout your distribution system. The The K-Factor Power Distribution Transformer traps harmonics reflected by distribution loads, significantly reducing the harmonic content of your distribution system. The K-Factor Power Distribution Transformer can be house inside the iPDU cabinet (iPDU-TX series only) or house separately in an external matching cabinet.



Intuitive Human Machine Interface (HMI)

The iPDU is equip with an intuitive Human Machine Interface (HMI), including a 7inch Coloured LCD Touch Screen Panel, allowing direct access and control of iPDU parameters, status, event logs and measurements.



Remote Communication

RS485 port with Modbus communication interface is available to remote monitoring and control the iPDU.

Ablerex iPDU Specification

MODEL	iPDU-TX 75	iPDU-TX 100	iPDU-TX 125	iPDU-TX 150	iPDU-TX 225	iPDU-TX 250	iPDU- 75	iPDU- 100	iPDU- 125	iPDU- 150	iPDU- 225	iPDU- 250
INPUT												
Input Voltage	380~415Vac											
Voltage Range	±15%											
No of Phases	Three Phase + Ground						Three Phase + Ground (+ Neutral)					
Power Factor	0.7~1.0											
Input Frequency	50/60Hz											
Input Current	From 100A to 350A (according to iPDU rated capacity)											
Input MCCB	From 125A to 400A (according to iPDU rated capacity) Higher rating MCCB available upon request.											
OUTPUT												
Capacity*	75kVA	100kVA	125kVA	150kVA	225kVA	250kVA	75kVA	100kVA	125kVA	150kVA	225kVA	250kVA
Output Voltage**	415/240Vac or 400/230Vac or 380/220Vac											
No of Phases	Single Line + Ground (+ Neutral)											
Efficiency	96.5% to 98%						99%					
Poles Per Cabinet	From 42P up to 84P*** max.						From 42P up to 168P max.					
PHYSICAL												
Dimension (WDH)	1000 x 900 x 2000 (mm)			1000 x 1200 x 2000 (mm)			600 x 1000 x 2000 (mm)			800 x 1000 x 2000 (mm)		
ENVIRONMENT												
Operating Temperature	0~40°C											
Humidity	0% to 95%, Non-Condensing											
Noise Interference	<55db						<50db					
Ventilation	Convection cooled											
CERTIFICATIONS												
Safety	CNS 14816-2, IEC 60947-2											
TRANSFORMER												
Type	Dry, K-Factor						Not Available					
Windings	Copper, H Class						Not Available					

*Other capacity are available upon request.

**Various output voltage ratings are available upon request.

*** 168Poles is available as an option upon request.

PMMM Specification

Display	7inch Graphic LCD Touchscreen
Interface	RS-485 (Modbus RTU), RS-422, Ethernet, USB
Monitoring	up to 6 MPMB and/ or up to 2 BCMB (84 Poles x 2 = 168 Poles)
Display	MPMB and BCMB parameters, three-phase voltage and current waveform, harmonic spectrum
Storage	Up to 16GB SD Flash Memory Card

MPMB Specification

Measuring Parameters	Accuracy
Frequency (Hz)	±1%
Each phase voltage & Line-to-line voltage (V)	±1%
Each phase current (A)	±1% >10% of rated current
Neutral current (A)	±1%
kVA, kW, kvar*	±3%
PF, cos φ**	±0.05
kVAH, kWh, kvarH**	±3%
Cabinet/Transformer Temperature	±2°C

* 1% (10%-100% of rated current), ±2% (1%-10% of rated current)

** Power accuracy range ±0.8 to 1.0 Power factor.

BCMB Specification

Measuring Parameters	Accuracy
Each Phase voltage (V)	±1%
Each branch current (A)	±2% (>2A); ±3% (<2A)
Each branch real power (kW)*	±3% (>2A); ±4% (<2A)
Each branch power factor (PF)*	±0.05
Each branch kWh*	±4%
Monitoring	Individual branch circuit from BCTB, Up to 4 BCTB or 84 Poles

BCTB Specification

Monitoring	Max. up to 21 Poles
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